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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,988	09/26/2001	Alan W. Shen	13768.218	3017

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EXAMINER	
PHAN, MAN U	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/963,988	SHEN ET AL.	
	Examiner	Art Unit	
	Man Phan	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 September 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16,20-24 and 26-36* is/are rejected.

7)☒ Claim(s) *17-19 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/26/01, 04/24/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The application of Shen et al. for the "Communicating multi-part messages Mbetween cellular devices using a standardized interface" filed 09/26/2001 has been examined. Claims 1-36 are pending in the application.

Claim Rejections - 35 USC ' 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites limitation "the transmission" in line 1, "the calling application" in line 4.

Claim 20 recites limitation "the transmission" in line 1,"the calling application" line 5.

Claim 26 recites limitation "the transmission" in line 1,"the calling application" line 4.

Claims 28, 32 recite limitation "the transmission" in line 1.

There is insufficient antecedent basis for these limitations in the claims.

3. Claims 9-16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 9-16 provides limitation for operation in accordance with operating Standards of TDMA, CDMA, UMTS, GSM etc., which makes the claim indefinite because such standard is subject to being changed. With further regard to claims 9-16, reliance on a

commonly known standard such as "supporting the delivery of 2G (GSM, TDMA, CDMA...) and 3G (UMTS, CDMA2000...) cellular signals as claimed is considered to be an obvious design choice by the artisan.

Claim Rejections - 35 USC ' 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4, 8-16 and 20-24, 26, 27 and 28-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayabe et al. (US#6,868,274) in view of Havinis et al. (US#6,516,197).

With respect to claim 1-4, 8 and 26, 27, Ayabe et al. (US#6,868,274) and Havinis et al. (US#6,868,274) disclose a novel system and method for communicating multi-part messages between cellular devices using API, according to the essential features of the claims. Ayabe et al. (US#6,480,911) discloses in Figs. 2 & 3 block diagrams illustrated a system and method for transmitting a displayable message between short message entities in more than one data package over a conveying network (Col. 10, lines 2 plus). The system (100) uses a capacity determiner (206) to determine a capacity of the conveying network for transmitting data. Based on this capacity of the conveying network, a fragmenter (204) divides the displayable message into fragments at an application protocol layer. The size of a fragment does not exceed the capacity of the conveying network (*the message must be transmitted as a plurality of short messages in order to comply with a size restriction of the cellular network*). Finally, a packager (208) packages the fragments into data packages. The data packages are operable to be separately transmitted by a short message service over the conveying network. The data packages may include a reference parameter corresponding to the position of the fragment in the displayable message. Further, a reference parameter may indicate the total size of the displayable message being fragmented and packaged (*dividing the message into a number of short message fragments of limited size before transmitting over the network*). When all of the fragments of the displayable message are received at the terminating short message entity (102, 104 or 105), a fragment retriever (304) retrieves the fragments. A message reconstructer (306) reconstructs the displayable message. The displayable message is then passed to a disposing device (308) (Col. 2, lines 34 plus and Col. 5, lines 62 plus).

However, Ayabe does not disclose expressly the step of receiving a function call from a calling application via a standard interface. In the same field of endeavor, Havinis et al. (US#6,516,197) discloses a service program or API (Application Program Interface), e.g., JAVA program, which is responsible for collecting information regarding the requests for location information, is either included in a Subscriber Identity Module (SIM) card, or other memory, of the MS or downloaded to the SIM card in the MS. As a result of performing a location calculation, the API within the MS initiates a mobile originated reporting Short Message Service (SMS) or Unstructured Supplementary Service Data (USSD) message to the serving network, which includes a time stamp of the time and date the positioning request was received, the number and/or duration of the positioning and the final calculated location of the MS (Fig. 4; Col. 3, lines 17 plus and Col. 5, lines 20 plus).

Regarding claims 9-16, the SMS is subject to ever-increasing demand at present and in third generation partnership project 3GPP systems, such as UMTS, CDMA 2000 systems, and also applicable in GSM, CDMA, TDMA systems. Ayabe teaches in Fig. 1 depicts a communication system 100 in accordance with the present invention, in which the wireless link between the BS and the MS is defined by one of a plurality of operating standards, e.g., AMPS, TDMA, CDMA, UMTS, GSM, etc. These operating standards, as well as new 3G and 4G operating standards define the manner in which the wireless link may be allocated, set up, serviced and torn down. These operating standards must set forth operations that will be satisfactory in servicing both voice and data communications.

Regarding claims 28-31, they are reversed processing claims for a receiving application to receive a multi-part messages and reconstruct the message corresponding to the claims 1-4, 8

above for sending application to send multiple short message fragments. Therefore, claims 28-31 are analyzed and rejected as previously discussed with respect to claims 1-4, 8 in reverse processing.

Regarding claims 20-24 and 32-36, these claims differ from claims Ayabe et al. in view of Havinis et al. in that the claims recited a computer program product for performing the same basis of steps and method of the prior arts as discussed in the rejection of claims 1-4, 8 above. It would have been obvious to a person of ordinary skill in the art to implement a computer program product in Ayabe in view of Havanis for performing the steps and method as recited in the claims with the motivation being to provide an efficient enhancement to the processing of multiple short message fragments between cellular devices, and easy to maintenance, upgrade.

One skilled in the art would have recognized the need for communicating multi-part messages between cellular devices utilizing standardized interface, and would have applied Havanis's teaching of the Application Program Interface (API) set for accessing functionality contained within the memory device into Ayabe's novel use of short message fragments for transmitting. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Havanis's system and method for reporting the number and/or duration of positioning requests for terminal based location calculation into Ayabe's method for transmitting a displayable message to a short message entity in more than one data package with the motivation being to provide a method and system for communicating multi-part messages between cellular devices using a standardized interface.

7. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ayabe et al. (US#6,868,274) in view of Havinis et al. (US#6,516,197) as applied to the claims above, and further in view of Mathon et al. (US#2001/0042131).

With respect to claims 5-7, Ayabe et al. (US#6,868,274) and Havinis et al. (US#6,516,197) disclose the claimed limitations discussed in paragraph 6 above. However, these claims differ from the claims above in that the claims require the feature wherein the act of processing the message comprises the compressing, encrypting and wrapping the message. In the same field of endeavor, Mathon et al. (US#2001/0042131) discloses in Fig. 1 a a block diagram illustrated the the system hardware architecture for transferring message, in which the message delivery network 101 includes a plurality of connectors 104 through which the calling application or users gain access to the message delivery network. Each connector 104 provides the necessary interface between the message delivery network 101 and the respective source and destination application or user. More specifically, connectors are the main workhorses of message delivery network 101. Each connector is responsible for encryption, compression, XML packaging, address resolution, duplicate message filtering and error recovery ([0028]-[0029]). Additionally, context exchange protocol message can be compressed, encrypted and/o digitallt signed in accordance with any of a number of known technique, such as ZIP compression for efficiency, XML encryption and XML signatures for security.

One skilled in the art would have recognized the need for communicating multi-part messages between cellular devices utilizing standardized interface, and would have applied Mathon's compressing, encrypting and wrapping the message and Havanis's teaching of the Application Program Interface (API) set for accessing functionality contained within the

memory device into Ayabe's novel use of short message fragments for transmitting. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Mathon's system for handling information and information transfers in a computer network, and Havanis's system and method for reporting the number and/or duration of positioning requests for terminal based location calculation into Ayabe's method for transmitting a displayable message to a short message entity in more than one data package with the motivation being to provide a method and system for communicating multi-part messages between cellular devices using a standardized interface.

Allowable Subject Matter

8. Claims 17-19 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest wherein comprising the following: an at of receiving a request for a delivery report for the message from the calling application; an act of gathering delivery reports received back from the communication network for each short message fragment; an act of interpreting the gathered delivery reports for each of the short message fragments to determine an appropriate delivery response for the message as a whole; and an act of returning the appropriate delivery response for the message as a whole to the calling application, as specifically recited in claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Ramasubramani et al. (US#6,507,589) is cited to show the method and apparatus for routing between network gateways and service centers.

The Bonefas et al. (US#2002/0052968) is cited to show the messaging method and apparatus for routing messages in a client server environment over multiple wireless and wireline networks.

The Mathis (US#6,269,254) is cited to show the radio communications device and method with API between user application program and telephony program and method..

The Ayabe et al. (US#6,108,530) is cited to show the system and method for transmitting a displayable message between short message entities in more than one data package.

The Ayabe et al. (US#6,141,550) is cited to show short message service.

The Capone et al. (US#2002/0042831) is cited to show system and method for building application that adapt for multiple device and protocol standards.

The Fradkov et al. (US#2004/0024610) is cited to show the transaction execution system interface and enterprise system architecture thereof.

The Lin et al. (US#2002/0156896) is cited to show the system and method for providing a gateway between mobile two-way messaging devices and remote computer networks.

10. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

09/08/2005.

Man U. Phan

MAN U. PHAN
PRIMARY EXAMINER